Appl. No. 10/007,331 Amdt. dated January 27, 2005 Reply to Office Action of December 29, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

Claims 1-56 (Canceled)

57. (Previously presented) A commercial-scale method for *in vitro* sialylation of terminal galactose residues on a glycoprotein, said method comprising contacting said glycoprotein with a reaction mixture that comprises a sialyltransferase, a sialic acid donor moiety, and other reactants required for sialyltransferase activity, for a sufficient time and under appropriate conditions to transfer sialic acid from said sialic acid donor moiety to said terminal galactose residues, wherein at least 80% of the terminal galactose residues present on the glycoprotein are sialylated.

- 58. (Canceled)
- 59. (Previously presented) The method of claim 57, wherein a greater percentage of terminal galactose residues are sialylated compared to an unaltered glycoprotein.
 - 60. (Canceled)
- 61. (Previously presented) The method of claim 57, wherein at least 90% of the terminal galactose residues present on the glycoprotein are sialylated.
- 62. (Previously presented) The method of claim 57, wherein the terminal galactose residues comprise one or more saccharides selected from the group consisting of

Appl. No. 10/007,331 Amdt. dated January 27, 2005 Reply to Office Action of December 29, 2004

Galβ1,4GlcNAc, Galβ1,4GalNAc, Galβ1,3GalNAc, Galβ1,3GlcNAc, Galβ1,3Ara, Galβ1,6GlcNAc, and Galβ1,4Glc.

- 63. (Previously presented) The method of claim 62, wherein the terminal galactose residues comprise Galβ1,4GlcNAc or Galβ1,3GlcNAc.
- 64. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Galβ1,4GlcNAc residues present on the glycoprotein are sialylated.
- 65. (Previously presented) The method of claim 63, wherein at least 80% of the terminal Galβ1,3GlcNAc residues present on the glycoprotein are sialylated.
 - 66. (Canceled)
- 67. (Previously presented) The method of claim 57, wherein the terminal galactose residues are present on an N-linked oligosaccharide.
- 68. (Previously presented) The method of claim 57, wherein the sialyltransferase includes a sialyl motif which has an amino acid sequence that is at least about 40% identical to SEQ ID NO: 1.
- 69. (Previously presented) The method of claim 68, wherein the sialyltransferase is an ST3Gal III.
- 70. (Previously presented) The method of claim 69, wherein the sialyltransferase is a rat ST3Gal III.

71-100 (Canceled)

Appl. No. 10/007,331 Amdt. dated January 27, 2005 Reply to Office Action of December 29, 2004

101. (Previously presented) The method of claim 57, wherein the glycoprotein comprises an immunoglobulin.

102-111 (Canceled)

112. (Previously presented) The method of claim 57, wherein the sialyltransferase is recombinantly produced.